

interval of the first and second fringe as three to two, and to the like dark interval between the second and third as two to one. For the breadths of the fringes seemed to be in the progression of the numbers $1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}$ and their intervals to be in the same progression with them; that is, the fringes and their intervals together to be in the continual progression of the numbers $1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}$, or thereabouts. And these proportions held the same very nearly at all distances from the Hair; the dark Intervals of the fringes being as broad in proportion to the fringes at their first appearance as afterwards at great distances from the Hair, though not so dark and distinct.

O B S. V.

The Sun shining into my darkened Chamber through a Hole a quarter of an Inch broad; I placed at the distance of two or three Feet from the Hole a Sheet of Past-board, vvhich vvas black'd all over on both sides, and in the middle of it had a Hole about three quarters of an Inch square for the Light to pass through. And behind the Hole I fastened to the Past-board vvith Pitch the blade of a sharp Knife, to intercept some part of the Light vvvhich passed through the Hole. The planes of the Past-board and blade of the Knife vvvere parallel to one another, and perpendicular to the rays. And vvhen they vvvere so placed that none of the Sun's Light fell on the Past-board, but all of it passed through the Hole to the Knife, and there part of it fell upon the blade of the Knife, and part of it passed by its edge: I let this part of the Light vvvhich passed by, fall on a vvwhite

white Paper there saw two ways from the tails of Comets its brightness streams, so the Hole in the through and I saw the two another, and and quantity the Sun's direction about a quarter its progress till it became these streams of three Feet Inches; so the the Knife of Yet sometime degrees further could scarce p some measure the two streams beyond the e Knife, and lo line of Light my Eye was i it was without Knife, or tow peared contiguous narrower than